b) separating, at a temperature between 50 and 100 °C, the hydrogen containing gaseous fraction into a hydrogen-rich gaseous fraction and a hydrocarbon-rich gaseous fraction by membrane separation means defined by having a methane separation selectivity and a hydrogen separation selectivity,

c) supplying the hydrocarbon-rich gaseous fraction obtained in step (b) to an absorber section, wherein to the top or discharge end of the absorber section a liquid hydrocarbon mixture is supplied to, which hydrocarbon mixture is poor in propene, and obtaining in said absorber section a lower boiling gaseous fraction rich in gaseous products having a boiling point of ethane or below, and

d) supplying the hydrocarbon-rich liquid fraction obtained in step (a) to a stripper section and obtaining in said stripper section a gaseous fraction and a higher boiling fraction comprising propene and hydrocarbons having a boiling point higher than ethane.

3. (Twice amended) The process of claim 1, wherein the higher boiling fraction is supplied to step (a).

6. (Twice amended) The process of claim 1, wherein the hydrogen separation selectivity of the membrane separation in step (b) is greater than 20, wherein the hydrogen separation selectivity is defined as the permeability ratio of hydrogen over methane.

REMARKS

Independent claim 1 has been amended so as to define the membrane separation means as having a methane separation selectivity and a hydrogen separation selectivity. Support for these attributes for the membrane separation means are found in the specification at page 4, line 25 through page 5, line 23. Claim 1 is further amended by language which recites that the stripper section provides a gaseous fraction as well as the higher boiling fraction. Support for this limitation is found in the specification at page 7, lines 32-34.

The Claim Objections

The informality of claim 6 has been addressed by amendment.